PRESTON (G. J.)

A Case of probable meningeal haemorrhage × × × × × × ×

A CASE OF PROBABLE MENINGEAL HÆMORRHAGE WITH SYMPTOMS RESEMBLING GENERAL PARESIS.*

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When we consider how abundant the blood supply of the brain is, and how slight is the support afforded the vessels by the soft tissue in which they are embedded or upon which they lie, it is not surprising that we often see cases of rupture of the vessels produced by external violence which is not sufficient to cause fracture of the skull. Cases of this kind are often very puzzling from the lack of localizing symptoms. Nor is it always easy to decide whether we are dealing with a case of diffuse hæmorrhage or one of laceration. The symptoms whether convulsive or paralytic, dependent upon injury done to the motor region of the cortex of the brain, are usually plain enough. Certain of the sensory cortical centers are sufficiently well known for localizing value, vision especially. The language center gives us another landmark for the left hemisphere. A large part of the occipital, parietal, and frontal cortical regions afford few symptoms of localizing value when injured.

The inferences to be drawn from the case to be related cannot of course be regarded as anything more than probable, since the patient has partially recovered. The case, however, was one of great in-

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terest to me, since the symptoms pointed to injury done both motor and psychic areas. The case referred to is briefly as follows:

James Price, colored, aged 30, laborer, with good family and personal history, admitted to City Hospital July 14, 1892. On the night of the 13th he was struck by a freight train and rendered unconscious, in which condition he was admitted into hospital. There was a very slight scalp wound and a few bruises in other parts of the body, but no external injury of any importance. The case was supposed to be merely one of concussion of the brain. There was no rise of temperature and at first no evidence of paralysis. Soon after admission the patient became delirious, talking in a wild, incoherent manner.

A careful examination made on July 16th showed that the patient had to a certain extent recovered consciousness but his mental condition was bad. There was partial paralysis of all four extremities with greatly increased reflexes and ankle clonus on both sides. No loss of sensation. Pupil reflexes normal and ophthalmoscopic examination revealed nothing abnormal.

After some days the patient got out of bed and upon attempting to walk he staggered and fell. He had a reeling, drunken gait and was not able to walk across the ward without support. There was a general tremor, intensified by any attempts at movement. His speech was thick and slurring, with a tendency to drop the ends of words. There was a slight fibrillary tremor of the muscles of the mouth when speaking, and also a spasmodic twitching of the right side of the face.

Gradually, that is during the first weeks, the patient developed a well marked delirium of grandeur. He imagined that he had plenty of money; told me that he had $5,000, which it is needless to say was entirely a delusion. The other patients in the ward were greatly amused at his extravagances. His memory was very defective and the accounts he gave of himself utterly untrue. These symptoms continued without any very marked change for nearly two months, and then a gradual improvement set in. His grandiose delusions slowly disappeared, his memory became clearer and the expression of his face, which had been very silly and self complacent, became more natural. The paralysis improved to such a degree that he was able to hobble across the ward with the aid of two canes. The muscular weakness continued great and the reflexes were still exaggerated; there was no muscular atrophy at any time. The patient left the Hospital about the middle of November.

The symptoms bore a striking resemblance to general paresis: the general paralysis involving as it did all four extremities and also the muscles of articulation, the tremor, altered reflexes, thick speech, muscular twitchings, loss of memory, and expansive delusions. Patient's friends reported that he was perfectly sound mentally and physically just prior to the accident. But for this fact and also for the fact that the symptoms gradually improved and the delusions disappeared I should have been inclined to regard the case as one of general paresis in which the symptoms had been merely intensified and hurried up by the shock. The

motor symptoms, paralysis, tremor, spasmodic movements, involving as they did all four extremities, point to a widespread, but slight lesion. The psychic symptoms, loss of memory and delusions point to the probable involvement of the frontal area. In all probability the frontal and Rolandic regions were involved to a degree sufficient to produce a partial but not complete loss of function. The symptoms indicate that the injury was to the cortex and of such a nature that the tissues gradually recovered, to some degree, their normal condition. The sudden onset of the symptoms, following an injury, points unmistakably to hæmorrhage, as does the gradual improvement due to absorption. The hæmorrhage must have been widespread to involve the motor and probably the frontal regions of both hemispheres.

The absence of fever almost precludes the possibility of meningitis. The most natural explanation of the condition is that as a result of the blow to the skull hæmorrhage occurred which covered the under surface of the dura-mater with a thin layer of blood, resembling what is known as pachymeningitis hemorrhagica interna.

The above case is interesting on account of the widespread symptoms following a traumatism and the close resemblance which these symptoms bear to those of general paresis. If, however, we keep in mind the pathology of general paresis, the explanation given of the probable nature of the case related above—namely, that the cortex was involved to a wide extent, but a slight degree only—becomes highly probable. Another conclusion which may I think be drawn from the case is the necessity of opening the skull in all cases in which, following injury, unconsciousness is long continued, regardless of other symptoms, and regardless of the apparent trivial nature of the head injury.

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